

REMARKS

The present application was filed on August 26, 2003 with claims 1-33.

In the outstanding Office Action dated May 9, 2006, the Examiner: (i) objected to the drawings as failing to comply with 37 CFR 1.84(p)(5); (ii) rejected claims 1-4, 9-13, 18-22, 26-28 and 33 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,086,618 (hereinafter "Al-Hilali"); (iii) rejected claims 5, 6, 8, 14, 15, 17, 23-25, 29, 30 and 32 under 35 U.S.C. §103(a) as being unpatentable over Al-Hilali in view of U.S. Patent No. 6,959,335 (hereinafter "Hayball"); and (iv) rejected claims 7, 16 and 31 under 35 U.S.C. §103(a) as being unpatentable over Al-Hilali in view of U.S. Patent No. 6,216,119 (hereinafter "Jannarone").

In this response, Applicants respectfully amend independent claims 1, 11, 20 and 27. Applicants respectfully request reconsideration of the present application in view of the amendments above and remarks below.

Regarding the objection to the drawings, Applicants have amended the paragraph beginning at page 12, line 3 by deleting any reference to reference numeral 335. This amendment corrects an error of a typographical nature. Applicants submit that no new matter has been added by the present amendment.

Amended claim 1 is directed to a method of constructing a model representative of a resource for use in managing a service associated with the resource, comprising the steps of associating a resource abstract model with the resource, wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered; and constructing the model representative of the resource based on the reduced set of resource metrics obtained in accordance with the resource abstract model. Support for the claim is found throughout the present specification, for example, on page 8, line 8 through page 9, line 10.

In an illustrative embodiment of the present invention, resource abstract models (RAMs) facilitate model discovery in that they can greatly reduce the data collected for model construction, a consideration that, if not addressed, can significantly limit the extent to which model discovery is practical. To appreciate the concern here, as explained in the present specification, consider the

IBM DB2 database management system. In an enterprise system, there may be multiple instances, each collecting approximately 500 metrics available through the performance monitor. Other software components (e.g., application servers, web servers, operating systems, Java Virtual Machines) collect a large number of metrics as well. Thus, it is not uncommon to have tens to hundreds of thousand of metrics to consider when constructing a quantitative model. Using purely data driven techniques requires collecting data for each metric so that its contribution to a quantitative model can be evaluated. Unfortunately, data collection is time consuming and storage intensive.

In characterizing the Al-Hilali reference as allegedly meeting certain limitations of claim 1, the Examiner relies primarily on FIG. 4, column 9, lines 31-36 and column 10, lines 11-14. The Al-Hilali reference does not disclose configuring a resource abstract model to automatically determine a set of resource metrics to be used to construct a model (e.g., a system model) representative of the resource such that a reduced set of resource metrics is considered. Rather, Al-Hilali creates a system model “by first determining the resources used by the server application and defining ‘transactions’ that occur at the server application . . . . [a] transaction is an identifiable operation occurring at the server application in response to user/client behavior and can typically be measured in rate form (transactions per second) . . . . [f]urthermore, an anticipated user load based on user behavior can also be reduced to transaction rates with a server application.” (See page 4, lines 56-64 of Al-Hilali).

Thus, Al-Hilali does not use a resource abstract model to automatically determine a reduced set of resource metrics to be used to construct the system model. In fact, the Al-Hilali reference appears to be a data driven technique, similar to the IBM DB2 database management system referenced above, which has no mechanism for considering a reduced set of resource metrics.

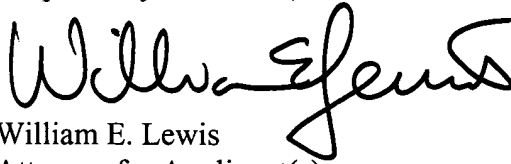
Accordingly, it is believed that the teachings of Al-Hilali fail to meet the limitations of amended claim 1.

Independent claims 11, 20 and 27 include limitations similar to those of claim 1, and are therefore believed allowable for reasons similar to those described above with reference to claim 1.

Dependent claims 2-10, 12-19, 21-26 and 28-33 are believed allowable for at least the reasons identified with regard to claim 1. Furthermore, Hayball and Jannarone do not remedy the deficiencies of Al-Hilali.

In view of the above, Applicants believe that claims 1-33 are in condition for allowance, and respectfully request withdrawal of the §102(b) and §103(a) rejections.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William E. Lewis", written in a cursive style.

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